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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/256,075	02/24/1999	BONG YONG SONG	4422-004	9348

7590

09/24/2003

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ALEXANDRIA, VA 22314

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 09/24/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/256,075

Applicant(s)

B. Y. Song et al.

Examiner

Naghme Mehropour

Art Unit

2686



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 3, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Feb 24, 1999 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2686

**Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S. C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. The drawings are objected to under 37 CFR 1.84(h)(5). Figure 3 on sheet 3, does not follow the specification description and claims limitation, Examiner suggests that above the connecting line between box 34 and 35, "YES" changes to "NO" and above the connecting line between block 34 and 35, "NO" changes to "YES" .

A proposed drawing correction are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, is rejected under 35 U.S.C. 102(e) as being anticipated by Shin (US Patent Number 5,687,171).

Art Unit: 2686

Regarding claim 1, Shin teaches a channel assignment method for multi-FA (frequency Assignment) CDMA cellular systems in which a base station communicates with a plurality of mobile stations (see figure 1, col 2 lines 15-20), comprising the steps of:  
comparing a first threshold value with received power when the base station receives a new call request (col 2 lines 47-50),

if the received power is less than the first threshold value,

assigning a traffic channel in a first FA of the request (see figure 2, S105, allocate corresponding radio channel, col 4 lines 1-10),

if not;

comparing a second threshold value (S104) with received power of the second FA, and

if the strength or received power is less than the second threshold (S104)  
(S105)

assigning a traffic channel in the second FA, and

if not,

rejecting the request (see figure 2, S106, reject corresponding radio channel, col 3 lines 10-14).

Shin teaches in figure 2 if the strength of received power is greater than the first threshold, the channel and start a new search (second search) at S101 measure the signal strength of the received signal and compare it with a 2nd threshold again, and if the level is less than the threshold (second threshold) assign the channel S105 and if not reject the channel (S106) (see <sup>reject</sup> <sub>1</sub>

Art Unit: 2686

figure 2, col 2 lines 5-52 col 4 lines 1-13). Shin reestablishes a new limit each time the loop is gone through. Consequently, the reference provides support for 1st and 2nd thresholds.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2, is rejected under 35 U.S.C. 103(a) as being unpatentable over Shin et al.(US Patent Number 5,687,171) in view of well known prior art (MPEP 2144.03).

Regarding claim 2, Shin teaches a method comprising the step of assigning a traffic channel in the first FA of the request, if there is an available channel when there is a new call request (see figure 2, col 2 lines 40-50). Shin does not mention that assigning a traffic channel in the first FA of the request, if there is an available channel when a base station receives a handoff call request. However the examiner takes official notice of the fact that assigning a traffic channel, if there is an available channel when a base station receives a handoff call is well known in the art.

Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine above teaching with Shin, in order to control the allocated received power by preventing wasting additional power, when the mobile moves to different areas.

Art Unit: 2686

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Mimura** (US Patent 6,032,045) disclose method of automatic frequency assignment in a mobile communication system

**McCarty** (US Patent 6,011,970) disclose method and system for assuring near uniform capacity and quality of channels in cells of wireless communications systems having cellular architectures

**Arnol et al.** (US Patent Number 5,361,258) disclose beacon detection system for sharing between and fixed microwave systems

**Nobbe et al.**(US Patent Number 5,551,064) disclose method and apparatus for communication unit frequency assignment

**Shanley** (US Patent Number 5,093,927) disclose two-way communication system

**Knutsson et al.** (US Patent number 6,128,506) disclose integrated power control and congestion control in a communication system

8. **Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

Art Unit: 2686

(703) 872-9314, (for formal communications indented for entry)

**Or:**

(703) 308-6306, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va., sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

If attempt to reach the examiner are unsuccessful the examiner's supervisor, Marsha Harold-Banks be reached (703)308-5576.

NM

Sept 8, 2003

*Marsha D Banks-Harold*  
MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600